



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,639	08/07/2002	Ake Bergstrom	P/1228-153	3099

2352 7590 11/12/2003

OSTROLENK FABER GERB & SOFFEN  
1180 AVENUE OF THE AMERICAS  
NEW YORK, NY 100368403

EXAMINER

DUNN, DAVID R

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,639

Applicant(s)

BERGSTROM ET AL.

Examiner

David Dunn

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

The Preliminary Amendment filed August 7, 2002 is acknowledged and has been entered. Claims 1-16 have been canceled and new claims 17-33 have been added.

### *Information Disclosure Statement*

1. The information disclosure statement filed March 29, 2002 is acknowledged. See enclosed IDS form.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17-25 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Cassese (4,811,812).

Cassese discloses a rear axle arrangement for a heavy vehicle, wherein the vehicle includes an elongated chassis element (1); the rear axle arrangement includes at least one separate rear axle unit (see Figure 1), the rear axle unit including a load bearing frame (“supporting structure”; see column 2, lines 27-30) and two wheels (5) respectively at lateral sides of the rear axle arrangement; the frame having a forward end region being adapted to connect to the chassis element (see Figure 2); and the two wheels of the rear axle unit are

Art. Unit: 3616

suspended on the frame (see Figure 4). The frame defines a space which extends through the frame structure (see Figure 1); the frame includes first and second (25, 11d, 11e, 11a) portions which are spaced apart from each other, are upstanding and extend in the longitudinal direction; an upper element (12c) connecting the side portions; and a lower portion (12a, 12b) below the upper portion. The frame is substantially a quadrilateral frame around the space (as defined by the upper, lower, and side portions). As seen in Figure 1, the lower section (11a) of the side is of greater extent in the longitudinal direction than the upper section (18) thereof. There are two lower sections (12a, 12b). There is an individual suspension (see Figure 4) for each wheel; comprised of lower and upper link arms (6) each being pivoted to the frame (24, 23) - each connected to the side portion of the frame. The rear axle unit includes a spring (9). The wheels are powered (4) with a differential gear extending through an aperture (between 11c, 116b, 11a, and 25; see Figures 1 and 4).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassese in view of the Examiner's Official Notice.

Cassese is discussed above and fails to show a towbar or coupling device.

Art Unit: 3616

The Examiner takes Official Notice that towbars and coupling devices are old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the frame of Cassese in order to include a coupling device or towbar in order to add additional towing capabilities to the vehicle.

6. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassese in view of Schmitz et al. (5,538,274).

Cassese is discussed above and fails to show the spring attached to the lower link arm.

Schmitz et al. teaches an individual suspension with lower and upper link arms with a spring (99) connected between the upper portion of the axle frame (95) and the lower link arm (56); see Figures 2 and 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cassese with the teachings of Schmitz et al. in order to allow for a longer spring if a lower spring rate was desired.

Regarding claim 27, Schmitz et al. shows a vehicle with multiple rear wheels (see Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cassese with the teachings of Schmitz et al. in order to mount an additional frame to the rear of the frame to allow for an additional set of wheels.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Emmons shows a modular frame of interest. Novak et al. shows a frame of interest.

Art Unit: 3616

Berckhan shows a frame with suspension of interest. Zetterstrom et al. shows a suspension frame of interest. Smith shows a suspension with a frame.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.

A handwritten signature in black ink, appearing to read 'David Dunn', with a long horizontal line extending to the right.

David Dunn  
Examiner  
Art Unit 3616